WHAT IS CLAIMED IS:

1. A device for interpreting XML documents, comprising:

an acquiring unit that acquires an XML document, wherein the XML document includes a plurality of elements that form a predetermined tree structure;

an arranging unit that arranges the elements in the XML document acquired in a row according to the tree structure in an order of appearance in the XML document of the elements;

an extracting unit that extracts character-string data from each of the elements arranged, wherein the character-string data include character string in a start tag and an end tag, and character string within the start tag and the end tag in the elements;

an identifying unit that identifies a node-type of each of the elements arranged, wherein the node-type indicates a kind in the tree structure for each of the elements;

a generating unit that generates link data that associates character-string data extracted with a node-type identified for each of the elements arranged.

2. An XML documents retrieving device that retrieves character strings from character-string data in XML documents that have a predetermined tree structure, comprising:

an XML documents acquiring unit that acquires a plurality of retrieval conditions;

a documents-structure data judging unit that judges whether a

plurality of documents-structure data arranged according to the tree structure in an order of appearance of elements in the XML documents matches with a corresponding one of the respective retrieval conditions;

a related character-string extractor that extracts character strings in the character-string data associated with the documents-structure data that is judged to match with the retrieval conditions; and

a related character-string judging unit that judges whether character string extracted by the related character-string extractor matches with a corresponding one of the retrieval conditions, wherein

when the related character-string judging unit judges that the character string matches with the retrieval conditions and when the documents-structure judging unit judges that the documents-structure data arranged subsequent to the documents-structure data that matches with the retrieval conditions, the related character-string extracting unit extracts character-string in the character-string data associated with documents-structure data other than the documents-structure data that is judged to match with the retrieval conditions, as the character string subjected to retrieval.

3. A method of interpreting an XML document, comprising:

acquiring an XML document, wherein the XML document includes a plurality of elements that form a predetermined tree structure;

arranging the elements in the XML document acquired in a row

according to the tree structure in an order of appearance in the XML document of the elements;

extracting character-string data from each of the elements arranged, wherein the character-string data include character string in a start tag and an end tag, and character string within the start tag and the end tag in the elements;

identifying a node-type of each of the elements arranged, wherein the node-type indicates a kind in the tree structure for each of the elements;

generating link data that associates character-string data extracted with a node-type identified for each of the elements arranged.

4. The method according to claim 3, wherein the arranging includes placing child elements of a parent element between the parent element.

5. A method of retrieving an XML document in which a character string is retrieved from character-string data in the XML document that have a predetermined tree structure, comprising:

acquiring retrieval conditions;

judging whether first document-structure data obtained by arranging elements in the XML document according to the tree structure in an order of appearance of the elements matches with the retrieval conditions acquired;

extracting a character string in the character-string data

associated with the first document-structure data that is judged to match with the retrieval conditions;

judging whether the character string extracted matches with the retrieval conditions;

judging whether second document-structure data arranged subsequent to the first document-structure data matches with the retrieval conditions upon judging that the character string extracted matches with the retrieval conditions; and

extracting a character string in the character-string data associated with the second document-structure data that is judged to match with the retrieval conditions upon judging that the second document-structure data arranged subsequent to the first document-structure data matches with the retrieval conditions.

6. The method according to claim 5, wherein the first document-structure data and the second document-structure data include node-types that indicate kinds of nodes in the tree structure and link data that associates the character-string data.

7. The method according to claim 6, wherein

the judging whether the first document-structure data matches with the retrieval conditions and the judging whether the second document-structure data matches with the retrieval conditions

include judging whether the node-types and the link data match with retrieval conditions.

8. The method according to claim 6, wherein

the extracting a character string in the character-string data associated with the first document-structure data and the extracting a character string in the character-string data associated with the second document-structure data

include extracting the character-string data based on the link data.

9. A computer program that realizes on a computer a method of interpreting an XML document, the computer program making the computer execute:

acquiring an XML document, wherein the XML document includes a plurality of elements that form a predetermined tree structure;

arranging the elements in the XML document acquired in a row according to the tree structure in an order of appearance in the XML document of the elements;

extracting character-string data from each of the elements arranged, wherein the character-string data include character string in a start tag and an end tag, and character string within the start tag and the end tag in the elements;

identifying a node-type of each of the elements arranged, wherein the node-type indicates a kind in the tree structure for each of the elements;

generating link data that associates character-string data extracted with a node-type identified for each of the elements arranged.

10. A computer program that realizes on a computer a method of retrieving an XML document in which a character string is retrieved from character-string data in the XML document that have a predetermined tree structure, the computer program making the computer execute:

acquiring retrieval conditions;

judging whether first document-structure data obtained by arranging elements in the XML document according to the tree structure in an order of appearance of the elements matches with the retrieval conditions;

extracting a character string in the character-string data associated with the first document-structure data that is judged to match with the retrieval conditions;

judging whether the character string extracted matches with the retrieval conditions;

judging whether second document-structure data arranged subsequent to the first document-structure data matches with the retrieval conditions upon judging that the character string extracted matches with the retrieval conditions; and

extracting a character string in the character-string data associated with the second document-structure data that is judged to match with the retrieval conditions upon judging that the second document-structure data arranged subsequent to the first

document-structure data matches with the retrieval conditions.